## MANUFACTURING EXTENSION PARTNERSHIP Success Stories from the Field

## **Inertia Switch Inc**

**New York Manufacturing Extension Partnership** 

Inertia Switch, Inc. Increases On Time Delivery with Lean

#### **Client Profile:**

Inertia Switch, Inc., produces specialized switches for the U.S. military. The company is a full-service design, engineering, and manufacturing firm founded in 1950. Inertia specializes in acceleration switches of all kinds in addition to limit switches, prostheses, incandescent digital displays, and many other standardized and unique products. The company employs 18 people at its facility in Orangeburg, New York.

#### Situation:

Inertia was awarded AS9100 B and ISO 9001:2000 certifications which increased demand for the company's products. Inertia felt the recent economic downturn and sales started to decline. "During this time period," stated Inertia's COO and Chief Engineer, Brian DiGirolamo, "it seemed prudent to train my staff and apply lean manufacturing efficiencies to meet customer demand when business picked up again." DiGirolamo called upon the Hudson Valley Technology Development Center (HVTDC), a NIST MEP network affiliate and division of the New York Manufacturing Extension Partnership.

#### Solution:

HVTDC designed a job scheduling board for the machining area that enabled them to build in smaller batches avoiding build up of unnecessary components. A workplace organization methodology was implemented in the tooling area that focused on 5S which includes sorting, straightening, shining, standardizing and sustaining. FIFO (first in, first out) lanes were set up in the assembly area to facilitate smoother product flow of smaller batches of products. Product flow became very visual and the smaller runs helped to significantly reduce inventories and enable Inertia Switch to be more responsive to customer demands. DiGirolamo said, "HVTDC managed every aspect of this development from engineering to machining. They mapped out a six month plan to meet delivery demands since it had to be built twice as fast."

#### Results:

- \* Increased on time delivery by 91 percent.
- \* Reduced inventory by 50 percent.
- \* Reduced floor space by 25 percent.
- \* Increased scrap rate from 1 percent to .1 percent.

### **Testimonial:**

"Lean training from HVTDC has equipped our engineers with the most efficient methods so we can deliver the highest quality products on time all the time."



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Brian DiGirolamo, COO and Chief Engineer

